 

# CHARLESTON: RACE, WATER, AND THE COMING STORM

*By Susan Crawford*
*Reviewed Jeff Peterson*[*]

## I. INTRODUCTION

The American coast is in big trouble. A warming climate is supercharging hurricanes and their deadly and damaging storm surges. Rising sea levels push storm surges further inland than ever before while also bringing gradual but permanent inundation to places that have been dry land. Sea levels may rise by up to seven feet by 2100, and continue rising at an accelerating rate for the next several centuries. Seawater will lap at the doorsteps of both rich and poor, but disadvantaged communities are often more exposed to flood risk and less able to cope with impacts. Success in meeting global targets for reducing greenhouse gas emissions would slow, but not stop, rising seas.

Government reports and academic research studies fully document the dramatic impacts that coastal storms and rising seas are bringing to coastal cities. Despite growing confidence in the flood risks to coastal communities among scientists and public officials, most people in these communities have been slow to come to grips with the peril they face. Government reports and academic studies are strong on facts but weak on storyline, empathetic characters, and the deft touch that drives a reader to the next page. In *Charleston: Race, Water and the Coming Storm*, Susan Crawford offers what the government studies lack as she tells the compelling story of people in a renowned American city facing a future of ever rising water. She gives the reader a clear picture of the science foretelling the devastating impacts of coastal storms and rising seas, but focuses on how people are sorting out what the discouraging science means for economic viability, cultural integrity, and social justice in their community.

Millions of Americans have visited Charleston – it is rated a top tourist destination in the country. Many people reading Crawford's engaging story will find the setting familiar and feel they have a stake in Charleston's success. Thinking about the choices Charleston faces will also prompt readers to think critically about how other coastal cities will cope with a diagnosis of gradual, long-term inundation. Crawford's book will surely have a positive influence on Charleston's future. But it also makes a lasting contribution to the critical work of helping the American public understand the dramatic changes that more intense storms and rising seas are bringing to coastal cities and opening people's minds to considering the hard choices that coping with rising water will demand.

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## II. CHARLESTON FACES HARD CHOICES – WHAT TO DO

A key insight of Crawford's work is that the City of Charleston and other coastal, urban areas must make choices among several options for a substantive response to deal with more severe storms and rising seas (i.e., decide what to do). But, they must also develop effective, broadly inclusive planning processes to support decision-making (i.e., decide how to decide what to do).

Charleston faces several unfortunate circumstances related to flooding. It is located on the south Atlantic coast and exposed to coastal storms projected to grow more severe because of a warming climate. In addition to storm surges from the sea, more intense rainfall is expected to fall inland where it will flow down several rivers and, meeting higher ocean waters, back up into the city. Charleston has coped with storms for centuries, recovering as flood waters drain away. But rising sea levels will bring both higher storm surges and every day, permanent inundation. The National Oceanic and Atmospheric Administration predicts that sea level in Charleston could rise by over a foot and a half by 2050, close to seven feet by 2100, and over twelve feet by 2150.

Crawford tells the story of Charleston's past efforts to cope with flood waters from early settlement to today. Charleston has tried to fill wetlands and build over them, improve drainage to minimize flood impacts, and build seawalls to protect parts of the city. In 2019, the city sponsored the "Dutch Dialogues" to hear from Netherlands flood control experts who offered innovative plans for stormwater management. But the city has been slow to implement these ideas, partly due to their cost.

In the past several years, the U.S. Army Corps of Engineers have developed plans for a major new seawall around the core of the city. This idea has drawn the interest of local officials because it has a high ratio of benefits to costs (i.e., the value of property protected is greater than the cost of the project) that might attract federal dollars. Crawford, however, points out some important issues with this proposal. It will only protect a small part of the city. In addition, even the Army Corps' limited seawall plan would require local matching funds to pay the high costs of construction. Charleston is not able to meet its local share, leaving local officials to speculate that they may need to wait for a major storm disaster and then hope that the federal government steps-in to cover the local costs of the project.

Perhaps the most fundamental problem with the seawall, however, is that it is designed as a solution to the old, familiar problem of storm surge flooding and not as a solution to the new, existential threat posed by rising sea level. Crawford persuasively, but gently, describes the only strategy that will save Charleston – relocation to higher ground. To her credit, she speaks to this controversial idea with the words of Mark Twain in mind: "The truth must be served like a coat, and not thrown in the face like a wet towel."

Relocation is presented as the challenging but unavoidable option, backed up by the conclusion of the Intergovernmental Panel on Climate Change writing in its *Sixth Assessment* report.

> Only avoidance and relocation can remove coastal risks for the coming decades, while other measures only delay impacts for a time, have increasing residual risk or

> perpetuate risk and create ongoing legacy effects and virtually certain property and ecosystem losses (high confidence).

Crawford cuts through the hand wringing and denial over relocation by offering a series of practical suggestions of what effective relocation might look like. For example, she makes a case for limiting new development in flood risk areas right away so that future relocation is more manageable. In the case of those with property already in a flood risk area, she suggests financial incentives to encourage people to move that grow smaller over time to encourage early action. New initiatives to make information about flood risks, including future sea level rise, much more widely available could prompt people to take a hard look at a buyout offer. Crawford makes the critical point that, although Charleston must live with some unfortunate geography, the good news is that there is high ground north of the city that makes large scale relocation physically feasible.

## III. HOW TO DECIDE AMONG HARD CHOICES

Every resident of Charleston has a stake in the measures that are adopted to manage the coming flood waters. Crawford makes the point that it is not enough for the city to just make the right choice. The process that the city follows to engage the public in charting a path forward also matters and the process needs to be broadly and relentlessly inclusive. Why? Because most people will be affected in their daily lives. Because everyone will need to contribute to the costs. Because, for hundreds of years, the Black community in Charleston has been denied a say in most decisions and suffered the brutal indignities of racism.

What does a strong process look like? Crawford makes some good suggestions. For example, she points out that Charleston should be cooperating with neighboring communities to find a coastal flood resilience solution that works on a regional scale. The planning process needs to be built for the long run rather than to produce a one-shot report. And, because the federal government will need to pay a significant part of the costs of coping with the coming flood, the city improves its chances of getting federal funds if it engages federal agencies early and often.

All well and good. But perhaps the most important step the city can take to create an effective planning process is to create strong partnerships with local community organizations and build the trust of local leaders throughout the community, but especially in the Black community. Crawford lays out in convincing detail the central role that racism played in the development of Charleston. Starting from early days as a key destination for slave ships, through years of discriminatory zoning and segregation, to the failure to provide sufficient and safe affordable housing, to the "dress codes" used today by businesses to steer Black people away from nightlife where White tourists are preferred, Charleston has a lamentable and undeniable record of racism.

One of the most enjoyable aspects of *Charleston* is the care that Crawford takes to introduce the individuals that are coping with flooding and have played parts in deciding how the city manages flood waters. She tells the reader about Joe Riley, Mayor of Charleston for 40 years, who was a "fanatic for annexation." He oversaw dramatic expansion of the Charleston city limits but limited flooding investments to small scale stormwater management projects. John Trecklenburg,

Mayor since 2016 who is famous for playing the piano on any occasion, invited flood experts to Charleston for "Dutch Dialogues" to make recommendations to manage future floods but has been slow to implement new practices.

Crawford also introduces leaders in the Black community who have often not been included in the city's flood planning. Michelle Mapp, engineer, high school teacher, housing advocate, and lawyer, is working to improve housing in Charleston but sees a place unprepared for future flooding.

> I've been saying for the thirteen years that I've been here that we're one hurricane away from being a totally different community. And it scares me. I know the number of folk in this community who live in mobile homes still. Who live in substandard housing . . . Where will these people go?

The Rev. Joseph Darby, a fourth-generation minister and former pastor of a prominent Black church, was not consulted as part of the Dutch dialogues.

"There should be some significant Black participation in that because some of those flooding problems really hit the Black community hard," Darby said about the Dutch Dialogues. He was disappointed in the city's efforts to work with Black residents.

Latonya Gamble, the president of the Eastside Community Development Corporation, and a Black woman who grew up in Charleston's East Side public housing that was built on top of the city dump, sees the burden that flooding poses.

"I can't tell you how many times they have to start over, because there's mold in the house or it flooded and they have to throw away their stuff . . . ."

She sees the stormwater management plans and the seawall proposed by the Army Corps as inadequate.

> [W]e're going to address the storm water, but if it does not reach within our community, then we need to come up with a better plan. You know what I'm saying? I think that's a good plan to have, but then we need an additional plan, so that we can give our residents some relief.

By presenting the biographies of local leaders, rather than just their views on flooding, Crawford makes a case that these people are necessary to a strong planning process that can discover a path toward flood resilience. Charleston faces an existential crisis but now has a chance to follow Winston Churchill's advice to "[n]ever let a good crisis go to waste." Crawford finds in local leaders reasons to hope that the people of Charleston can overcome past failures and reinvent a city that is higher, drier, and socially just.

## IV. CONCLUSION

In a concluding chapter, Crawford points out that Charleston is not alone in the flood challenges it faces or in lacking a plan for effective response. She calls on Charleston, other local governments, and the federal government to work together to deliver the timely and effective strategies for migrating to higher ground that are an inevitable outcome of geography and a changing climate for Charleston and many other coastal cities.

> Charleston's lack of preparation is clearly not unique. But we can predict that the catastrophic effects of climate change in Charleston will lead to a large movement of people, many of whom will be Black and low-income. For much of coastal America,

> Charleston is a bellwether. If we continue to muddle ahead as we are now, that migration is likely to be panicked, forced, miserable, and unfair. Neither local governments in the US nor the federal government have grappled with how to deal with making that migration work on a large scale. It would be a good idea to plan ahead as a nation, starting right now, for this future.

The country clearly needs the science and research community to continue its invaluable work to document and improve understanding of the risks that a changing climate poses for the American coasts. Also needed, however, are stories of specific places that people know and individuals they can relate to. In *Charleston,* Susan Crawford paints an engaging and thought-provoking picture of the flood challenges that coastal communities face that will help build the country's collective willingness to make the hard choices that a changing climate will demand.